

1988 MANAGEMENT PLAN
SOUTHEAST ALASKA PURSE SEINE FISHERY

By
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MANAGEMENT PLAN

PURSE SEINE FISHERY - 1988

INTRODUCTION

This management plan is intended to provide interested persons an overview of the 1988 salmon purse seine fishery for southeast Alaska. The expected run size, management problems, and harvest strategy will be discussed. This plan is based on the 1988 pink salmon forecast and extensive escapement and catch data files. The staff members listed at the conclusion of this plan are available to provide further details.

The purse seine fishery normally accounts for 70% to 90% of the southeast Alaska commercial salmon harvest with pink salmon the major target species in most areas. Other salmon species are important to purse seine fishery, but most sockeye, chum, chinook, and coho salmon catches are usually taken incidentally to the pink salmon catches. As a result of this dependence on pink salmon, management of the purse seine fishery is based largely on pink salmon stock conditions. Purse seine fisheries specific to other species of salmon and terminal hatchery areas do occur and will be discussed individually.

Southeast Alaska pink salmon runs are divided geographically into northern and southern stocks once they enter the inside waters. This plan is divided into a southern portion, consisting of Districts 1 through 7, and a northern portion, consisting of Districts 9 through 14.

A total region harvest of approximately 42.1 million pink salmon is anticipated for the 1988 season, a vast majority of which will be available for harvest in the purse seine fishery. Of the total harvest, approximately 38.1 million pink salmon is forecasted for the southern districts and 3.3 million in the northern area. The expected uneven distribution of the run, in both the northern and southern areas, necessitates a conservative management approach for areas where weaker runs are forecasted.

The 1988 seining season is expected to begin Sunday July 3, in both the southern and northern areas. Areas to be open are expected to include the southeastern portion of Section 1-F, District 4, the Hidden Falls Terminal fishing area, and portions of Tenakee Inlet and Port Frederick.

MANAGEMENT GOALS

The primary management goals for the 1988 southeast Alaska purse seine fishery are as follows:

1. Obtain overall pink and chum salmon spawning escapement goals with the best possible distribution to all systems.
2. Provide for an orderly fishery while harvesting those fish in excess of spawning escapement needs.
3. Minimize, to the extent possible, the interceptions of salmon destined for the districts where weak runs are forecast.
4. Promote a harvest of good quality fish within the constraints dictated by run size and timing.
5. Manage the District 4 purse seine fishery consistent with the provisions of the U.S./Canada Pacific Salmon Treaty as specified by the Alaska Board of Fisheries.
6. Manage for a catch of chinook salmon (28 inches or larger) of 11,400 fish, exclusive of new Alaskan hatchery produced fish.

CHINOOK SALMON HARVEST

Alaska Board of Fisheries regulations require the department to manage the commercial net harvest of chinook salmon for an overall catch of approximately 20,000 fish. The board took this action to ensure that all user groups share in the reduced chinook salmon harvest levels specified by the U.S./Canada Pacific Salmon Treaty. The specific provisions for the seine fishery are as follows:

1. The seasonal seine catch limit is 11,400 chinook salmon.
2. Only chinook salmon 28 inches in length or larger (as measured from tip of snout to tip of tail) will count against the purse seine catch limit. That is the same size limit currently used in the troll fishery.
3. The board specified non-retention of 28 inch and larger chinook salmon as the primary management measure for maintaining the catch limit. The board recommended the institution of chinook salmon non-retention early in the season when total salmon catch rates are low, which allows for more efficient release of chinook salmon. This will allow for retention of chinook salmon, as long as possible, during the time period when catch rates for other species increase to levels making it difficult to effectively release chinook salmon, without hindering the efficient operation of the seine fishery.
4. Purse seine CFEC permit holders may not sell chinook salmon within a size range of greater than 21 inches and less than 28 inches. The board considered that chinook salmon between 21 and 28 inches could be readily identified, segregated, and effectively released during seining operations. Seiners are encouraged to avoid fishing areas that contain

concentrations of chinook salmon within this size range and to quickly release those which are caught to minimize mortality.

5. Seiners may possess and sell chinook salmon that are less than 21 inches (approximately 5 pounds or less), however, they will not count against the catch limit. These fish have generally not been separated for other species during the seining operation in the past. The board considered it impractical to segregate and successfully release chinook salmon less than 21 inches.

The amount of fishing time anticipated to harvest the forecasted pink salmon returns will necessitate restrictive regulatory measures to maintain the purse seine catch of 28 inch and larger chinook salmon at the desired level.

Seiners can anticipate non-retention of chinook salmon (28 inches or larger in length) during seine fishing periods authorized through most of July. Exceptions to this will be chum salmon directed seining in the Hidden Falls and chinook salmon directed fishing in hatchery terminal fishing areas. The Hidden Falls chum salmon seine fishery is anticipated to be very intensive, making efficient release of chinook salmon impractical.

Following the early season non-retention period, seiners will be allowed to retain chinook salmon, 28 inches or larger, until the catch limit is obtained. This will be announced via a department news release.

Despite early season non-retention efforts, it may still be necessary to implement non-retention during the pink salmon seining season. If this occurs, seiners are encouraged to avoid fishing areas with high concentrations of chinook salmon and release those caught quickly and in a manner so as to minimize mortality.

The department needs the cooperation of the fishing industry to ensure an accurate separation of chinook salmon sold that are 28 inches or larger in length from those that are 21 inches or smaller in length. To accomplish this, the department will require that all chinook salmon sold that are 28 inches or larger in length be specified on fish tickets as species 410 which is pre-printed on each ticket. Chinook salmon 21 inches or smaller should be indicated on fish tickets as species 411, which needs to be filled in at the time of sale.

SOUTHERN DISTRICTS PURSE SEINE FISHERY

1988 Pink Salmon Forecast

The pink salmon forecast for the southern districts is for a point estimate return of 44.1 million fish, with a range of 31.9 to 63.9 million. The current combined index escapement goal for the southern districts is 6.0 million pink salmon. This allows for a potential harvest of 38.1 million

fish at the point estimate. However, in order to achieve a good distribution of spawning escapement, it is expected that an additional 3 to 4 million pink salmon will be needed beyond the current goal level. This will reduce the harvest level by the same amount. The distribution of the return is forecasted to be uneven and similar to that of the parent year run. A majority of the return is expected to be produced from pink salmon stocks returning to streams in Districts 1, 2, and 3.

Management Problems

Although a large overall pink salmon harvest is forecasted, the anticipated uneven distribution of the return will complicate management of the fishery. The returns to Districts 6 and 7 are exposed to major seine fisheries on mixed stocks of pink salmon in other districts and a conservative management approach will be necessary to prevent over fishing of these stocks. Intensive fishing efforts are anticipated in District 4. This is an area of highly mixed stocks and fishing effort will be monitored closely to prevent overharvesting salmon runs before they enter more terminal areas.

Management Plan

The overall management plan for the southern districts' purse seine fishery consists of four separate, but related, segments.

District 4

The Alaska Board of Fisheries adopted regulations (5AAC 33.361) requiring the District 4 salmon purse seine fishery be managed according to the provisions of the treaty between the United States of America and the Government of Canada concerning Pacific salmon. Under the terms of that treaty, the District 4 purse seine fishery is to be managed during the years 1985 through 1988 in a manner that will result in a maximum four-year total harvest of 480,000 sockeye salmon before statistical week 31 (before July 24 in 1988). This represents an average annual harvest of 120,000 sockeye salmon during the specified period.

During the first three years of the treaty (1985 to 1987), the catch of sockeye salmon has totaled approximately 265,000 fish prior to statistical week 31. This catch is approximately 215,000 fish less than the maximum four-year harvest of 480,000 fish.

The 1988 management approach will be to harvest the remaining portion of the allowable maximum limit to the extent that it does not adversely impact the conservation of sockeye salmon. Some southeast Alaska sockeye salmon stocks are considered depressed and excessive catches could impact their long term conservation. Recent analysis of sockeye salmon scales has indicated the

highest percentage of Alaska stocks, in District 4 seine fishery, generally occurs during the initial weeks of the season.

An intensive inseason scale sampling and analysis program will be in place to evaluate the presence of local Alaskan sockeye salmon during the first three weeks of the season. If this analysis does not indicate a serious conservation problem for local stocks, the fishery will be managed in a manner which will provide a reasonable opportunity to harvest the remaining sockeye salmon on the allowable limit.

The 1988 season opening date for District 4 is Sunday, July 3 (the first Sunday of July). The initial open period will be of 39 hours duration. A second open period during the first week of the season should not be expected. This will allow time to sample the catch, analyze the scales, and evaluate the fishery impacts on Alaskan sockeye salmon stocks.

Additional fishing during the first three weeks will be based on the results of the scale analysis, anticipated fishing efforts and time needed to harvest the available sockeye salmon; again, to the extent of not adversely impacting local stocks.

Beginning in late July, and continuing until the district is closed, purse seine management will be based on the size of pink salmon returns to the inside fishing districts, and the need to harvest a portion of these returns in District 4. During this period, purse seine fishing time in District 4 should not be expected to be more than that being allowed in the inside fishing districts. If returns to inside waters develop below forecast levels, then it may be necessary to curtail the District 4 fishery.

Inside Waters Fishing Areas

Intensive aerial surveys of early run pink salmon producing areas, primarily Boca de Quadra, East Behm Canal, Ernest Sound, and their approaches, will begin in late June and early July. No early season test fishing is anticipated as good overall pink salmon returns are expected.

Seining in the inside waters is expected to begin on Sunday, July 3. The period will be limited to 15 hours duration and will be confined to the southeastern portion of Section 1-F. Seining during the second fishing week, commencing Sunday, July 10, and for subsequent open periods will depend on the observed developing pink salmon run strength in all areas. The southernmost section of District 2, portions that are south of Scott Point, are expected to be initially open during the second week of the season.

An early season closure should be anticipated, in the vicinity of the entrance to Boca de Quadra, to minimize the incidental take of sockeye salmon returning to Hugh Smith Lake. Poor returns of sockeye salmon are expected to that lake in 1988. The closure will correspond to a similar closure of the northern portion of the Tree Point drift gill net fishing area.

A conservative management approach will be followed for seining in Clarence Strait. As in recent years, seining will be limited to the southern portion of District 2, until such time as escapements of pink salmon into northern Clarence Strait, Ernest Sound, west Behm Canal, Cholmondeley Sound, and Kasaan Bay can be assessed and appear to be increasing at a rate that would ensure good escapements to those areas. Additionally, no seining should be expected in middle Clarence Strait, along the Ship Island and Tolstoi Shores, until it can be reasonably assured that pink salmon spawning escapement goals will be obtained in Districts 6 and 7.

Seining in the northern portion of Clarence Strait, Districts 6 and 7, will be based on inseason assessments of pink salmon run strength. Major purse seine fisheries are not expected in Districts 6 and 7. Pink salmon returning to these districts will, however, contribute to seine fisheries in Districts 1, 2 and 4.

Strong returns of late run pink salmon are expected to District 3. Parts of this district could open as early as the last week of July, however, it is expected that a general opening in the district will not occur before the first week of August.

Purse seining in District 5 will be dependent upon the observed run strength and any openings should not be expected until early August.

Fall Chum Salmon Fisheries

Specific watersheds along the east coast of Prince of Wales Island, in District 2, produce late run chum salmon which have traditionally supported fall purse seine fishing after the pink salmon season. Although no formal forecasts are available for these returns, some expectations can be based on parent year escapements. The parent year, 1984, fall chum salmon spawning escapements were average in Disappearance Creek, the primary spawning stream in Cholmondeley Sound, and in the Karta River in Kasaan Bay. For the 1988 season, average returns of fall chum salmon are expected for Cholmondeley Sound and to the Karta River in Kasaan Bay, while poor returns are expected to other areas. Fall chum salmon fishing should not be expected until early to mid-September, and any openings will be based on observed run strength.

Terminal Hatchery Fisheries

For the 1988 season, special terminal area seine fisheries can be expected at Neets Bay, Carroll Inlet, Nakat Bay, and Earl West Cove to harvest fish returning to Southern Southeastern Regional Aquaculture Association (SSRAA) enhancement facilities and Klawock Inlet to harvest salmon returning to the state operated Klawock Hatchery.

The fishery at Neets Bay will be managed jointly with SSRAA and according to the Neets Bay Management Plan (5AAC 33.370). The plan allows for seining from July 1 through October 20. The actual fishing periods will be announced in joint news releases by the department and SSRAA.

Special private contract cost recovery fisheries are planned for Carroll Inlet, Nakat Inlet and Earl West Cove. The fisheries are being authorized by the SSRAA. Seiners should contact SSRAA for registration procedures and authorized fishing times. The department is requesting that seiners, participating in these special contract fisheries, make special efforts to ensure their catch is reported to the proper statistical area.

A harvestable return of approximately 335,000 chum and 60,000 coho salmon is expected to return to the state operated Klawock Hatchery. These fish will contribute to the seine fisheries in Districts 3 and 4. However, it is likely that as many as 200,000 chum and 20,000 coho salmon will be available for harvest in a terminal fishery. Pending the observed run strength, seining may be possible in early September. The fishery will be confined entirely to Klawock Inlet to minimize the harvest of wild stock chum and coho salmon transiting the area.

NORTHERN DISTRICTS PURSE SEINE FISHERY

1988 Forecast

The 1988 pink salmon forecast for the northern districts is for a point estimate return of 7.9 million fish, with a range from 5.2 to 10.6 million. The overall pink salmon spawning escapement goal for the northern districts is 4.6 million fish. This would allow for a harvest of approximately 3.3 million fish at the mid point of the forecasted return. This will vary depending on the actual run strength and distribution.

Overall pink salmon returns are expected to be good in Districts 9 and 12 but poor with little available harvestable surplus in other districts. The waters of District 12 support early, middle and later runs of pink salmon while middle and late runs predominate in District 9. Returns to Districts 10, 11, 13, and 14 are expected to produce limited harvest opportunities and these will be predominately in local areas. The most likely possibilities being returns to Hoonah Sound in Peril Strait beginning in mid-July and the southern portions of Seymour Canal beginning in mid to late July.

The State operated Hidden Falls Hatchery located at Kasnyku Bay is expecting a chum salmon return of approximately 480,000 fish. The numbers of fish available for harvest was not known at the time of preparation of this management plan due to the uncertainty of the utilization of a portion of the return for hatchery cost recovery. A portion of the surplus chum salmon may be incidentally harvested during pink salmon directed fisheries in Chatham Strait (District 12). However, because of an early season conservative pink salmon management approach the maximum opportunity to harvest Hidden Falls chum returns will be at the terminal area.

Management Problems

The anticipated uneven pink salmon run distribution will necessitate a conservative management approach for the inside areas. A major early season management concern will be to prevent excessive interceptions of salmon in the Icy Strait and Chatham Strait mixed stock fishing corridors until run strength can be assessed in terminal areas. This is particularly true of early run stocks returning to Frederick Sound and Stephens Passage in Districts 10 and 11, which are forecasted to be weak.

Management Plan

The northern area purse seine fishery management plan consists of four segments, one for each major fishery.

Outside Water Fishing Areas

Management of Sections 13-A and 13-B, along the outer coastal areas of Baranof and Chichagof Islands, is distinct from the management of the northern inside fishing areas, as these fish enter directly from the ocean and do not pass through major inside migration corridors.

Poor overall pink salmon returns are expected to the outer coastal fishing areas and no general seining is expected until adequate run strength can be determined. Aerial and vessel surveys will begin in early July. Although poor overall returns are expected, two notable exception may be for pink salmon returns to Starrigavan Bay and Slocum Arm, where parent year spawning escapements were good. Pending the observed run strength, seining could begin as early as the first or second week in August in these areas.

All of the fish returning to the Northern Southeastern Regional Aquaculture Association enhancement facilities in Sitka Sound will be needed for brood stock and/or cost recovery. Purse seining in the vicinity of these facilities will be based on the need to harvest pink salmon.

Short purse seine openings to harvest sockeye salmon along the outer coast of lower Baranof Island are expected to take place during mid-July to early August. These fisheries are targeted on harvesting sockeye salmon returning to Necker Bay and Redfish Bay and openings will be based on developing sockeye salmon run strength. More than one opening may be allowed in Redfish Bay, pending inseason observations.

Inside Waters Fishing Areas

Aerial and vessel surveys to evaluate incoming pink salmon run strength and test fishing are expected to begin in late June and early July for the northern inside fishing districts. The 1988 seining season is expected to

begin on, Sunday, July 3 in portions of Tenakee Inlet for harvesting pink salmon and the outer portions of Port Frederick for harvesting summer chum salmon and at the Hidden Falls Hatchery terminal fishing area. The duration of the initial open periods will depend on salmon availability. Additional seining will depend on the assessed pink and chum salmon run strength.

Early run pink salmon producing areas, which are located at Tenakee Inlet in District 12, Seymour Canal in District 11, and in District 10, will be monitored closely. Fishing for early run pink salmon is expected to be limited to local areas. Unless the early returns are considerably stronger than anticipated, in all areas, no mixed stock fishing should be anticipated in Chatham Strait until middle and late runs begin to enter the area.

Seining may begin during mid-July in portions of Peril Strait to harvest early run pink salmon destined for Hoonah Sound. As the later returns to the outer portions of Peril Strait are expected to be weak, seining in Peril Strait is not expected during the entire summer season.

By late July, middle and late run pink salmon returns should start to enter the inside northern districts. The initial opening of Chatham Strait may be expected in late July to assess the strength of the incoming District 12 middle run returns of pink salmon.

By regulation, purse seine fishing in the District 12 portions of Chatham Strait during the month of July will be restricted to south of the latitude of Point Marsden. The intent of this regulation is to minimize interception of sockeye salmon destined for the drift gill net fishing areas in Districts 11 and 15, by purse seine gear fishing along the Hawk Inlet Shore. Beginning on August 1, any purse seine fishing along the Hawk Inlet Shore will, as in recent years, be in accordance with the corridor area management approach endorsed by the Alaska Board of Fisheries. Under this approach, purse seine fishing is allowed as far north as the latitude of Hanus Reef Light, along the Hawk Inlet Shore, to allow better seine harvest opportunities for pink salmon migrating into upper Stephens Passage and Lynn Canal. However, if the observed pink salmon run strength in streams near Point Howard is sufficient, purse seining is allowed along the Point Howard shoreline.

As poor returns of pink salmon are forecasted for upper Stephens Passage and Lynn Canal, no seining is expected north of Point Marsden during 1988.

The good overall pink salmon returns forecasted for District 9 should allow seining to begin in the late July to early August period. A good productive seining season is expected during August. The best seining is expected along the shore of Kiui Island in Section 9-B. Seining along the Baranof Island shore is expected to be limited to the vicinity of Red Bluff Bay as pink salmon returns to other portions of Section 9-A are not expected to produce harvestable numbers.

Fall Chum Salmon Fisheries

Portions of the northern fishing districts support distinct returns of fall chum salmon which are harvested by purse seine gear. No formal forecasts are available for these fall chum salmon runs. Parent year (1984) fall chum salmon escapements were generally good and a good fall fishing season is expected. Areas expected to be open include Port Camden, Security Bay, Chaik Bay, Nakwasina Sound, Katlian Bay and Excursion Inlet. Fall seining will be managed on the basis of visual observations of run strength in the bays beginning in Mid-August and continuing through September and October.

As in recent years, seining for fall chum salmon at Excursion Inlet will not be allowed south of the latitude of Excursion Point. This issue has been discussed with the Alaska Board of Fisheries. It is designed to minimize the interception of salmon destined for gill net fisheries in Districts 11 and 15 while seining for chum salmon at Excursion Inlet.

Terminal Hatchery Fisheries

For the 1988 season, special hatchery terminal area seine fisheries can be expected at the Hidden Falls hatchery. At the time of preparation of this management plan it is not known if the facility will be operated by the State or under a private contract. The cost recovery needs for operation by a private contractor could change the management approach.

The Hidden Falls terminal fishing area is expected to be initially open Sunday, July 3. The duration of the open period will depend on the availability of chum salmon. High fishing efforts should be anticipated. Additional chum salmon fishing will depend on assessments of the incoming run strength. However, if the run develops at the forecasted level, weekly fishing periods can be expected until late July.

Interception of pink salmon has been high in the Hidden Falls terminal fishing area. This is generally because, after the initial large catch of chum salmon in the immediate vicinity of Kasnyku Bay, many seiners fish out in Chatham Strait proper where good numbers of pink salmon are available. The Hidden Falls fishery will be monitored to determine the availability of pink salmon. If pink salmon conservation problems become apparent, seiners may anticipate some adjustments in the open fishing area to prevent excessive interception of pink salmon. The management approach will be to start an open period in the entire terminal area and then, after fishing a portion of the period, reduce the size of the open area to the immediate vicinity of Kasnyku Bay.

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The following is a list of telephone numbers that may be called during the purse seine fishing season to obtain recorded announcements concerning areas open to purse seine fishing:

Ketchikan	-	(907) 225-6870
Petersburg	-	(907) 772-3700
Sitka	-	(907) 747-5022
Juneau	-	(907) 586-3505